

# THE SILVER AND GOLD SPOTTER

*National Weather Service, Reno, NV*

*Spring 2014*

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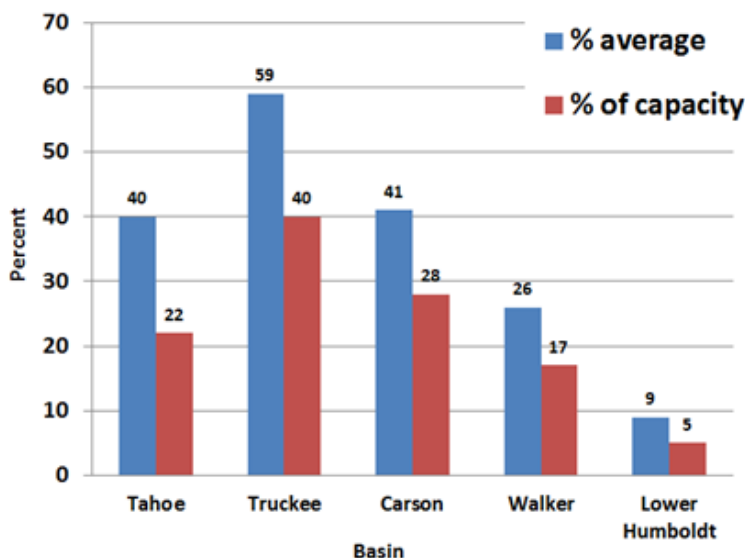
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## Winter 2013-2014 Wrap-Up and Spring Water Outlook

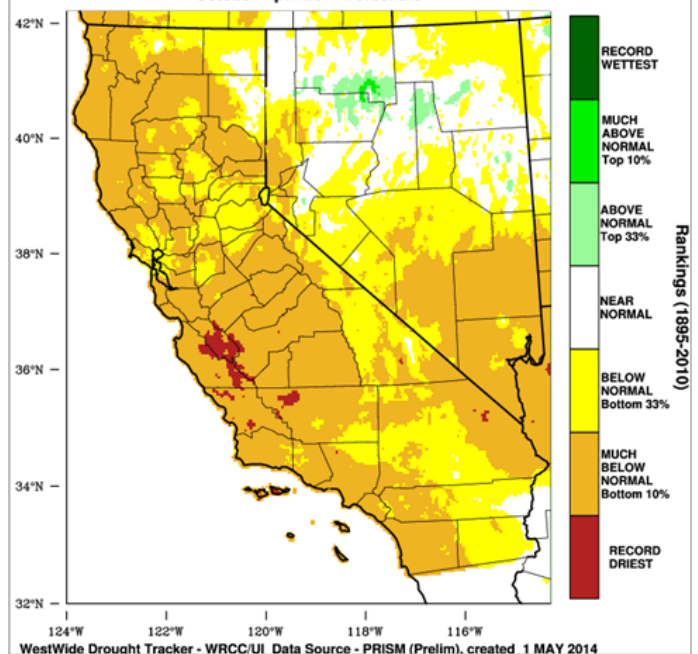
While some late season storms did help, the third dry winter we have experienced in a row has most definitely had an impact on many areas. As of the end of April, most reservoirs were well below average for this time of the year and only a fraction of their overall capacity, as can be seen in the chart on the bottom left. On the bottom right, it can be seen that during the winter period (October through April), much of California and portions of Nevada experienced below to much below normal precipitation. What are the major impacts facing us this spring? Well first, with less snow and the recent warmth, peak flow and runoff is expected to occur earlier than usual, and in many locations has happened in the past week. There are also many impacts to agriculture, ranching, fisheries, forests, and wildlife due to significantly reduced water allocations. Other than the typical summertime restrictions, urban areas in northeast California and northwest Nevada are not expected to have any additional restrictions in place. However, being that we live in a desert and are in a drought, it is always wise to make smart water choices and limit water use where you can.

If you would like to learn more about water supply and upcoming outlooks, please check [here](#).

### Reservoir Storage as of 4/30/2014



### California - Precipitation October-April 2014 Percentile



## May is Nevada Wildfire Awareness Month and May 4-10 is California Wildfire Awareness Week

The dry winter has brought increased wildfire risk to the region and as the past has shown us, with the right conditions in place, fires can spread rapidly. If you live in an area with high wildfire risk it is suggested that you prepare for a possible wildfire. You can do this by building defensible space around your home and hardening your home by using materials that are fire resistant. Now that you are ready, you can get set by making sure you have a wildfire evacuation plan for your family and pets. Have an emergency supply kit for each member of your family, and then have a family communication plan set so everyone can be tracked down in an emergency. Hopefully you will never have to be in a fire, but with good preparation, you can make sure that you and your loved ones stay safe!

Do you know when the highest risk fire days are? Make sure you look out for Red Flag Warnings from your local National Weather Service office! We will issue a Red Flag Warning for the following criteria: 1) Dry thunderstorms are expected and it is likely that the lightning will start fires. 2) The combination of low relative humidity and strong and gusty winds. On top of these criteria, fuels also must be cured and ready to burn. Keep your awareness up on these Red Flag days and don't do anything that could contribute to a fire start!

BROUGHT TO YOU BY:



# WILDFIRE IS COMING. ARE YOU READY?

<http://www.readyforwildfire.org/>



Below: The devastating Caughlin Ranch Fire November 2011

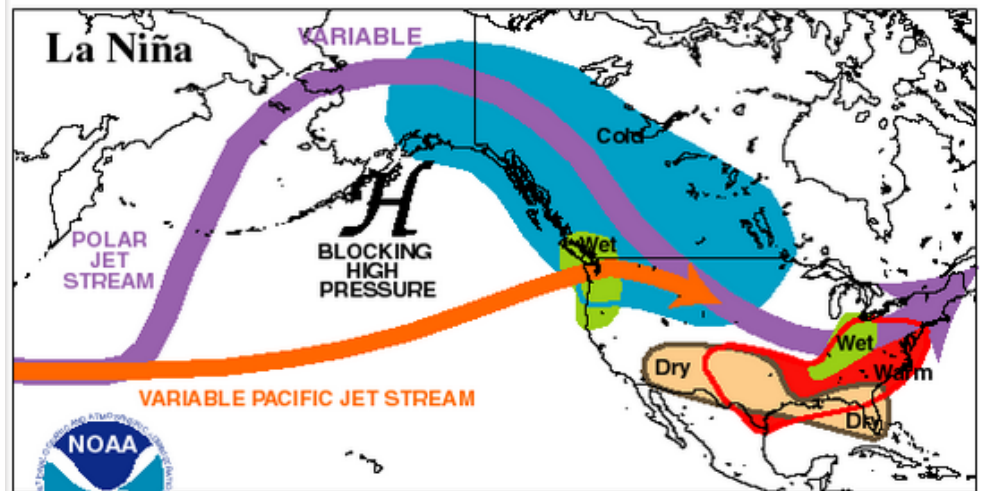
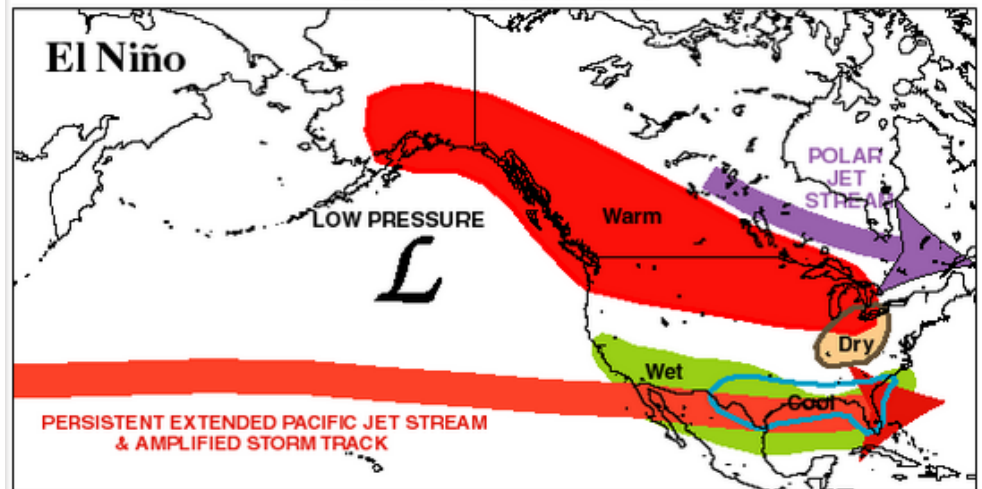


## El Niño Watch

ENSO (El Niño / Southern Oscillation) Neutral conditions continue as of late April/early May, but with a trend in warming sea surface temperatures (SSTs) in the eastern tropical Pacific and continued above average SSTs near the International Date Line, the Climate Prediction Center (CPC) has issued an [El Niño Watch](#). This means that conditions are favorable for an El Niño episode to develop within the upcoming 6 months. Please keep in mind that this does not guarantee that an El Niño will develop and it will likely be into summer or fall before confidence increases. Even if an El Niño does develop the impacts to north-east California, the Sierra, and northwest Nevada are variable and uncertain. Past El Niño years have produced both wet and dry winters for our area. A lot of it depends on the strength of the El Niño and how it is interacting with other global circulations. It is impossible at this point to determine the strength of the El Niño because the development is possible, not inevitable. The biggest question is will this help to alleviate the drought conditions? Unfortunately this is not an easy question to answer. Strong El Niños have corresponded to increased precipitation over southern California, but have little correlation to central and northern California and Nevada, which is where the majority of the reservoirs for drought storage are located. A weak El Niño has little to no correlation to increased precipitation in northern California or Nevada. In a typical water year we will see 5 Atmospheric River events, which accounts for a large portion of the winter's precipitation. A strong El Niño can increase this to 8 events, but there is no guarantee this will occur this winter. Stay tuned for future outlooks this coming fall and winter!

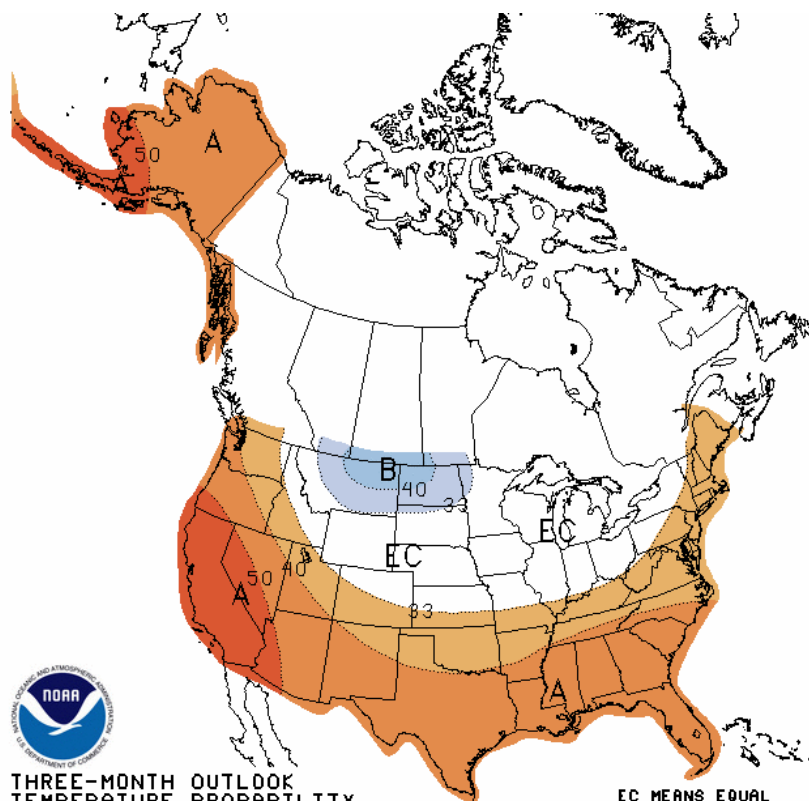
### *El Niño and La Niña-Related Winter Features Over North America*

#### TYPICAL JANUARY-MARCH WEATHER ANOMALIES AND ATMOSPHERIC CIRCULATION DURING MODERATE TO STRONG EL NIÑO & LA NIÑA



Climate Prediction Center/NCEP/NWS

# Climate Prediction Center (CPC) 3 Month Outlook



The CPC Temperature Outlook, valid for May, June, and July is indicating better chances for above normal temperatures during the late spring/early summer period.



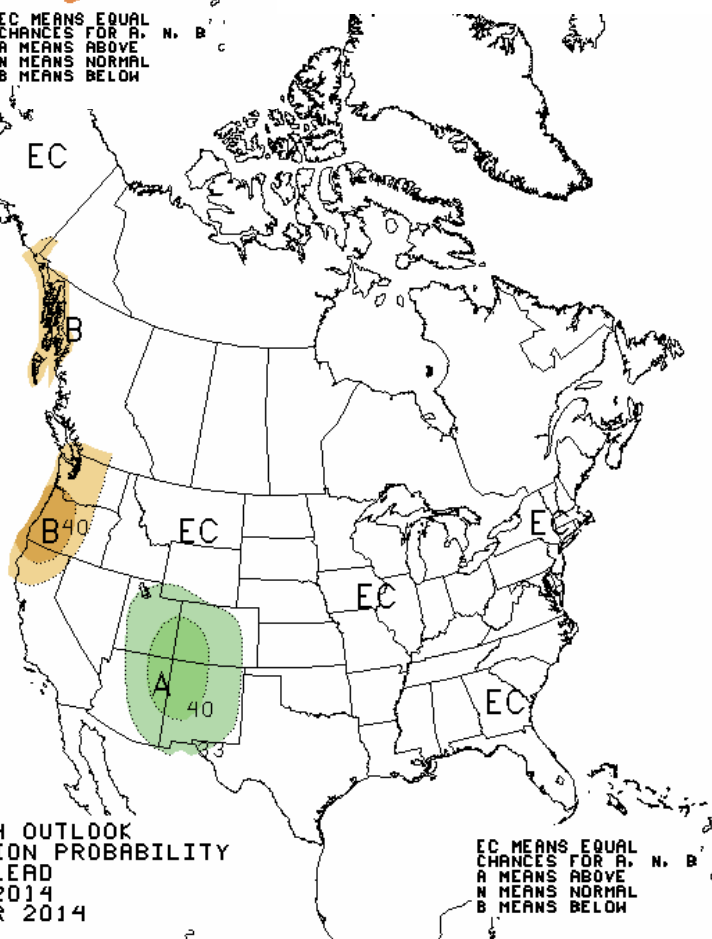
THREE-MONTH OUTLOOK  
TEMPERATURE PROBABILITY  
0.5 MONTH LEAD  
VALID MJJ 2014  
MADE 17 APR 2014

EC MEANS EQUAL  
CHANCES FOR A, N, B  
A MEANS ABOVE  
N MEANS NORMAL  
B MEANS BELOW

The CPC Precipitation Outlook, valid for May, June, and July is indicating even chances for above or below normal precipitation, outside of northern California where it is expected to be slightly below normal.



THREE-MONTH OUTLOOK  
PRECIPITATION PROBABILITY  
0.5 MONTH LEAD  
VALID MJJ 2014  
MADE 17 APR 2014

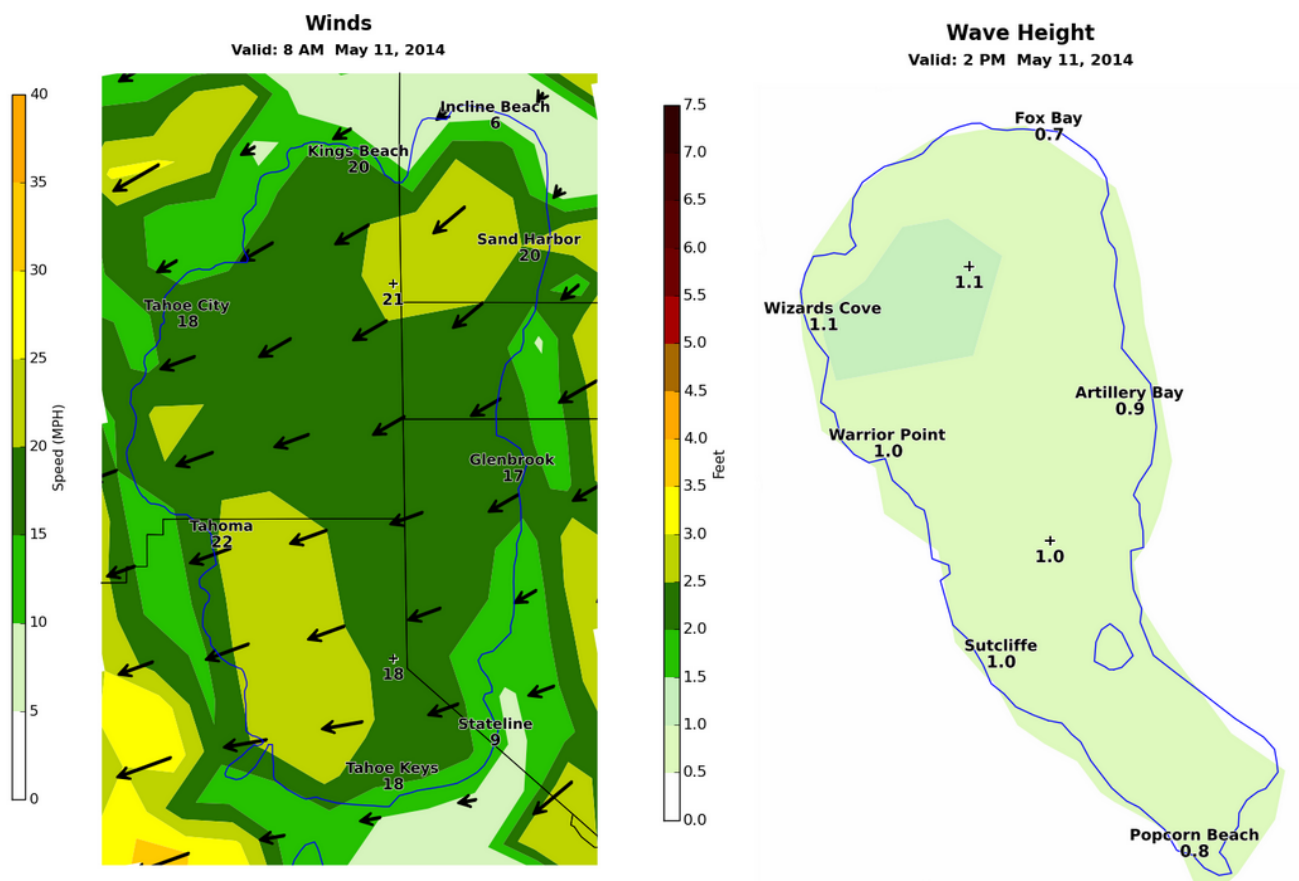


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## Improved Lake Forecast Webpage

Did you know you can get lake specific forecasts for both Lake Tahoe and Pyramid Lake? Check out our new and improved Lake Forecast page [here](#). You can get graphical wind direction and speed forecasts as well as wave height estimates, or you can still access the text version of these products. In addition, you can check out available web cameras for either lake and also view current observations. You can also be alerted to any Lake Wind Advisories that are in effect. These are issued year-round for Lake Tahoe and Pyramid Lake and for all lakes in northeast California and northwest Nevada from Memorial Day through Labor Day when gusty winds of 35 mph or greater are expected, causing choppy lake conditions. Small boats are not recommended on lake waters during such conditions due to the increased risk of capsizing.



## New For Summer Severe Weather

If we are expecting a significant severe weather outbreak with severe thunderstorms, flash flooding, or in those very rare instances funnel clouds or tornadoes, we are now going to send out a heads up email to you, our spotters. These are not going to be for run of the mill thunderstorm events, but rather for days that could have a major impact, therefore you will likely only get a couple emails from us in a given summer. In the email we will specify what the expected threats are and also ask that you call the toll free hotline to report any significant conditions in your area. Thank you for continuing to support the SkyWarn Spotter Program and for helping report ground truth! We greatly appreciate all you do!

NATIONAL WEATHER  
SERVICE, RENO, NV

*Working Together to Save Lives*

*Are you Weather Ready?*



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Follow us on



**Have a weather question ?  
Email us and let us know! Your  
question with our answer may  
appear in our next newsletter!**

## Spring and Summer Reporting Guidelines

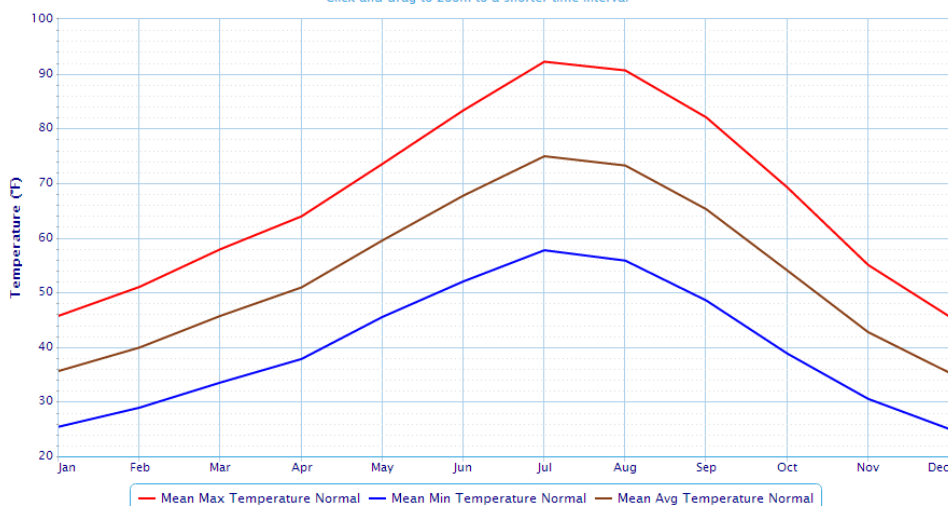
- **Hail**— 1/2 inch in diameter and larger. Hail needs to be one inch (quarter-sized in diameter) to be considered severe. Always report the largest hailstone you have observed in terms of the diameter. Also report hail that is accumulating and covering the ground.
- **Winds**— All winds greater than 45 MPH
- **Heavy Rain**—Falling at a rate of 1" per hour or greater — may be a precursor to flash flooding.
- **Flash Flooding**—Report rapid rises in creeks and streams. Flash flooding occurs very quickly, and generally is of short duration ( < 3 hours)
- **Low Visibility**— Visibility less than 1/2 mile for any reason
- **Any and All Weather Related Damage, Death, or Injury**— If weather causes any damage, death, or injury.
- **Tornado**— All tornadoes, include their duration and direction of movement.
- **Funnel Cloud**— All funnel clouds, watch for rotation. Include their duration and direction of movement.
- **Wall Cloud**—All wall clouds, include their duration and direction of movement.

## Normal vs. Average—Do You Know the Difference?

The arithmetic average of a meteorological element over 30 years is defined as the climatological normal. So, the key difference between the two is that a normal is strictly for 30 years, whereas an average can be computed over any time span. Official normals are calculated by the National Climatic Data Center for temperature and precipitation elements and are updated through the end of each decade ending in zero (for example, 1981-2010). These official normals can be slightly different from a strict average because they also take into account changes in the station over the thirty-year period. These changes can include changes in the instrumentation, the location, the observing practices, the observation time, or in the surrounding environment. In addition, normals are “normalized” to fit a smooth monthly/yearly temperature curve while averages are not.

Monthly Climate Normals (1981–2010) – RENO TAHOE INTL AP, NV

Click and drag to zoom to a shorter time interval



Left: Example of Temperature normals at the Reno Airport through the year. Note the smooth curve to the data.